A New Muscoid Genus from the Chiricahua Mountains, Arizona (Dip.).

By Charles H. T. Townsend, U. S. Bureau of Entomology, Washington, D. C.

On August 4, 1917, while seeking shelter in a shallow cave under overhanging rock walls of South Fork Cave Creek, Chiricahua Mts., Arizona, at an altitude of about 5500 feet, the writer found a single female of a very remarkable fly resting on the roof of a pocket at one end of the cave. Diligent search made subsequently in similar situations failed to disclose additional specimens. The reproductive system was extracted and proves the fly to belong to one of the Calirrhoid groups, as indicated by the external head characters.

CHIRICAHUIA new genus.

Head in profile nearly twice as high as its length, in front view almost as wide as its height. Eves proportionately small, thinly but distinctly hairy, extending about as low as tips of antennae or about two-thirds' way to vibrissae. Lower profile of head rounded, bulged downward. Vibrissal axis equal to antennal axis. Clypeus broad, rather elongate-oval in outline, widened below, in nearly same plane throughout, feebly carinate on upper half. Epistoma in front view very short and restricted, in same plane with clypeus, not produced, about level with vibrissae. Facialia widely separated, only slightly curved inward below, with sparse downwardly-directed bristles on lowest third, the vibrissae widely separated and a little longer than the bristles below them. Proboscis very short, less than one-third head-height. Palpi reaching nearly to end of proboscis, moderately stout, subcylindrical. Antennae inserted far above eye-middle, extending scarcely over half way to oral margin, second joint but little elongate, third joint about two and one-half times length of second and of even width. Arista bare, basal joints short, inserted nearly half way down third antennal joint. Front very broad, taking up nearly half the head-width at vertex, widening anteriorly, scarcely as long as its average width. Parafrontalia averaging somewhat broader than frontalia, narrowing posteriorly. Frontal bristles descending to base of third antennal joint. Outer vertical well developed, directed strongly outward and a little forward. Three proclinate fronto-orbitals, the hind one directed more outward and representing the ordinary reclinate pair, a very small one between the front two and some microchaetae outside. Frontalia extended into narrow divergent prongs behind, the ocellar area occupying half their length. Ocellars present, proclinate. Parafacialia rather broad, averaging about one-third width of clypeus, with row of downwardly-directed bristles along frontedge, this row paralleled on lower half by a short row behind it near lower end of eye. Cheeks almost as wide as eye-length, nearly as wide as vibrissal axis. Occiput broadly bulged behind eyes. Occiput and cheeks sparsely clothed with short bristles.

Two sternopleurals, three postsuturals. Four marginal pairs of scutellars, the apical pair slightly longest. No costal spine, third vein bristled about half its length, other veins bare. Apical cell narrow, attenuate on distal third, open, ending in wing-tip, the fourth vein only gently sinuate, the third vein curved strongly backward distally. Hind crossvein straight, nearer to small crossvein than to cubitus. Tegulae smaller than average. Legs short, front tarsi but little wider than others.

Abdomen of four segments, the last two segments a little longer than the first two; without macrochaetae, with only bristly hairs which are a little longer and more erect on anal segment.

Chiricahuia cavicola new species.

One female, in small cave in rock cliffs of South Fork Cave Creek, Chiricahua Mts., Arizona, 5500 feet, August 4, 1917 (Townsend). Holotype, No. 21580, U. S. N. M., TD. 5130.

Length of body, 5 mm.; of wing, 4.5 mm. Lemon-yellow; the abdomen, mesoscutum, scutellum, tibiae and tarsi brown; the pleurae, antennae and palpi light rufous. Frontalia brownish-rufous. Ptilinal suture conspicuously brown. Wing veins yellow, a small slight cloud at stigma; hind crossvein conspicuously clouded, also second, third and fourth veins evenly so on apical fifth of wing. Tegulae watery-white. In some lights the abdomen and scutellum appear yellow and the mesoscutum polished black.

This strange fly appears to belong in or near the Melanophorinae, and may be parasitic in some cave-frequenting host.